

## **REMARKS**

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner.

Upon entry of the present Amendment, Claims 1-3, 5-6, 10-19, and 21-22 will be all the claims currently pending for the Examiner's consideration. Of the pending claims, Claims 1, 2, 10, and 12-19 are withdrawn from consideration. Instantly, Claims 3 and 6 have been amended. Applicants respectfully submit no new matter has been added by the present amendment. Support for the amendment can be found generally throughout the disclosure. It should be noted this amendment is not in acquiescence of the Office's position on the allowability of the claims, but merely to expedite prosecution.

The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

### **I. REJECTIONS:**

#### **A. 35 USC 112, First Paragraph**

Claims 21 and 22 are rejected for reciting "combinations thereof" in the last line of each Markush group provided. The Office opines the same is not supported in the Specification as filed. Applicants disagree.

As set forth in the Application there is provided, "If appropriate, the active compound of the formula (I) can be employed in combination with ***at least one other active compound*** from the group of the insecticides or the fungicides, to widen the activity spectrum or to achieve particular effects...." (Page 7, Lines 15-18, emphasis added). Applicants then go on to provide various examples of such insecticides and fungicides, for example, various quaternary ammonium compounds and boron compounds.

As the Examiner is assuredly aware, the function of the written description requirement is "[t]o ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; to comply with the description requirement, it is not necessary that the application describe the claimed invention in *ipsis verbis*; all that is required is that it reasonably convey to persons skilled in the art that, as of the filing date thereof, the inventor had possession of the subject matter later claimed by him." (*In re Edwards*, 568 F.2d at 1351-52, 196 U.S.P.Q. at 467 (citations omitted)).

As clearly provided in Applicants' Specification, "[a]t least one other active compound," fully supports the presently claimed "combinations thereof" as it reasonably conveys to persons skilled in the art that, as of the filing date thereof, the inventor had possession of the subject matter claimed.

Withdrawal of the rejections is appropriate at this juncture.

B. 35 USC 112, Second Paragraph

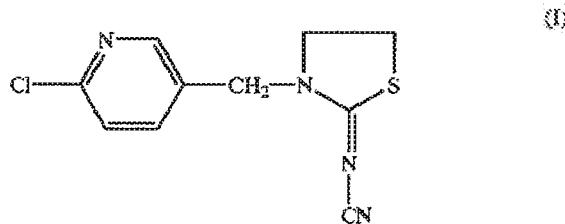
Claim 6 is rejected as being indefinite for its inclusion of 100% of active compound. Claim 6 is presently amended and said amendment renders the present rejection moot.

Withdrawal of the rejection is therefore requested.

C. 35 USC 102(a)

Claims 3 and 5-6 are rejected under 35 USC 102(a/e) in view of Erdelen et al., US Pat. Pub. No. 2003/0149080 (herinafter "Erdelen").

As best understood, Erdelen "relates to compositions for controlling plant pests, which contain the compound of the formula (I)



in a mixture with fungicidally active compounds, except for cyclopropylcarboxamide derivatives and azolylmethylcycloalkanes." (Abstract) Erdelen further provides that "[i]t is possible to use ... trace nutrients, such as salts of iron, manganese, boron, copper, cobalt, molybdenum and zinc." ([0101]) As is generally understood, trace nutrients are plant micronutrients. This means that they are only present in very small

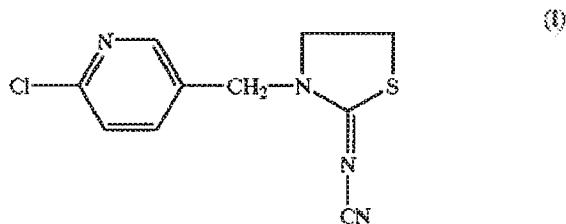
(micro) quantities as is necessary for a plant's health. As such, Erdelen's disclosure of micronutrients fails to disclose the use of a boron compound as an insecticidally or fungicidally active compound and, therefore, fails to anticipate Claim 3 as presently amended.

Withdrawal of the present rejections is requested at this time.

D. 35 USC 103(a)

Claims 3, 5-6, and 21-22 are rejected under 35 USC 103(a) as being obvious over Erdelen in view of Fritschi et al., EP 1025967 (hereinafter "Fritschi").

As indicated above, Erdelen "relates to compositions for controlling plant pests, which contain the compound of the formula (I)



in a mixture with fungicidally active compounds, except for cyclopropylcarboxamide derivatives and azolylmethylcycloalkanes." (Abstract) Erdelen, however, fails to disclose the particular quaternary ammonium compounds or boron compounds of the presently claimed invention.

As best understood, Fritschi relates to a wood preservative based on boric acid, a C<sub>2-4</sub> alkanolamine, quaternary ammonium compounds, thickeners and/or emulsifiers and water, which also contains a fungicide. (Abstract)

The use of thiachloprid is not disclosed by Fritschi.

The Examiner opines that it would have been obvious to use the quaternary ammonium compounds and boric acid compounds of Fritschi with the thiachloprid compound of Erdelen, because one skilled in the art would have expected the combination of elements, each individually useful for the same purpose, to be successful for use in the same purpose. It has long been established, however, that such a combination of elements does not render a synergistic result obvious (i.e., where the claimed combination does more than merely perform the function that each element performs separately, the same is non-obvious).

Applicants would like to draw the Examiner's attention to the attached Declaration under 37 CRF 1.132 showing unexpected synergistic results (Appendix A). As provided in Tables A and B, there are synergistic combinations of thiachloprid/benzalkonium chloride and thiachloprid/boric acid, respectively. Both combinations, in accord with the presently claimed invention, show a synergistic effect as compared to each active alone.

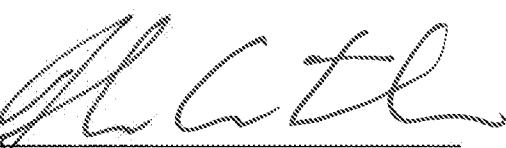
In light of the demonstrated superior and unexpected results, Applicants submit the present rejections should now be withdrawn.

**II. CONCLUSION:**

In summary, it is respectfully submitted that the instant application is presently in condition for allowance. Notice to the effect is earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

The USPTO is hereby authorized to charge any fees which may be required by this paper and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

By 

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## **APPENDIX A**

PATENT APPLICATION  
CH-8458 / CHS031011

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF ) CONFIRMATION NO.: 8750  
THOMAS JAETSCH ET AL )  
SERIAL NUMBER: 10/583,766 ) GROUP NO.: 1615  
FILED: JUNE 21, 2006 )  
TITLE: MEANS FOR PROTECTING ) EXAMINER:  
          AGAINST TECHNICAL MATERIALS ) BECKHARDT, LYNDSEY MARIE  
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Declaration under 37 C.F.R. § 1.132

I, Dr. THOMAS JAETSCH, a resident of Merlostr. 22, 50668 Köln, Germany do hereby declare as follows:

I have studied chemistry at the Technical University Berlin, Germany and at the University of Münster, Germany;

I received the degree of Dr. rer. nat. in chemistry at the University of Münster in 1990;

Since 1992 I have been an employee of LANXESS Deutschland GmbH (formerly Bayer Chemicals AG, formerly Bayer AG, Leverkusen, Germany), and presently work in the department of Material Protection thereof;

I am a research and application chemist having 18 years experience in the field of microbicidal chemistry, including the testing and evaluation of compounds; and

I received on behalf of Applicant, LANXESS Deutschland GmbH, the termite test results for various compositions of matter, the results of which are detailed in the following Tables A and B, said preparation and testing being conducted under SAA 32 E

08 screening procedures by the Materialpruefanstalt Brandenburg laboratory in Eberswalde, Germany (attached hereto as Exhibit 1);

Said results show that the tested combination of thiacloprid and benzalkonium chloride, and the tested combination of thiacloprid and boric acid exhibit synergistically enhanced activity as compared with the active compounds tested individually.

Table A

<i>Active ingredient</i>	<i>Concentration [ppm]</i>	<i>Mortality % after 14 days</i>	
Benzalkonium chloride	9.6	17	
Thiacloprid	0.2	38	
Thiacloprid + Benzalkonium chloride (1: 48)	0.2 + 9.6	<u>found*</u> 87	<u>calc.**</u> 48.5

\*found = real activity in biological testing

\*\*calc. = calculated activity using the Colby formula ( see Colby, S.R., "Calculating Synergistic and antagonistic Responses of Herbicide Combinations", Weeds 15, pp. 20-22, 1967)

Table B

<i>Active ingredient</i>	<i>Concentration [ppm]</i>	<i>Mortality % after 14 days</i>	
Boric acid	10	2	
Thiacloprid	0.2	38	
Thiacloprid + Boric acid (1: 50)	0.2 + 10	<u>found*</u> 88	<u>calc.**</u> 39.2

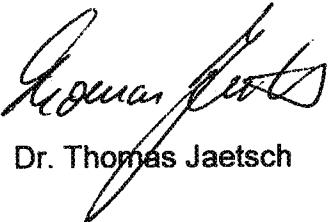
\*found = real activity in biological testing

\*\*calc. = calculated activity using the Colby formula

The undersigned Declarant declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at Leverkusen, Germany, this 2nd day of July 2010

Signature:

A handwritten signature in black ink, appearing to read "Thomas Jaetsch".

Dr. Thomas Jaetsch